

Amendments to the Claims

Please replace the Claims as shown below:

1. (Currently Amended) A network device comprising:

a first central processing unit (CPU), wherein said first CPU is integrated within said network device;

an input interface for receiving a plurality of packets coupled to said first CPU, said input interface comprising at least one input port wherein at least one said input port is configured to sample at least one input packet and transmit a sampled input packet to said first CPU, wherein at least one said input port comprises a countdown register, and wherein said input port is configured to sample a packet according to said countdown register, said countdown register operates by counting incoming packets;

a second CPU that is integrated within said network device;

an output interface for transmitting a plurality of packets coupled to said second CPU, said output interface comprising at least one output port wherein at least one said output port is configured to sample at least one output packet and transmit a sampled output packet to said second CPU, ~~wherein said input interface and said output interface feed into said CPU,~~ wherein at least one said output port comprises a countdown register, and wherein said output port is configured to sample a packet according to said countdown register, said countdown register operates by counting outgoing packets; and

~~a switching fabric coupled to said input interface and said output interface, said switching fabric configured to transmit wherein a packet can travel between said input interface and said output interface.~~

Claims 2 and 3 (Canceled)

4. (Currently Amended) A network device as recited in Claim 1 wherein said first CPU transmits said sampled input packet ~~and said sampled output packet~~ to a central control station over a network.

5. (Original) A network device as recited in Claim 4 wherein said central control station comprises a statistical monitoring station.

6. (Original) A network device as recited in Claim 1 wherein said sampled input packet comprises an identification of said input port that sampled said sampled input packet.

7. (Original) A network device as recited in Claim 1 wherein said sampled output packet comprises an identification of said output port that sampled said sampled output packet.

8. (Previously Presented) A network device as recited in Claim 4 wherein said network comprises a local area network.

9. (Previously Presented) A network device as recited in Claim 1 wherein said countdown register is a random number countdown register.

10. (Currently Amended) A method of sampling a packet comprising:
receiving a plurality of packets at an input network circuit of a network device,
said input network circuit comprising at least one input port;

sampling at least one input packet at said input port, wherein said sampling comprises using a countdown circuit;

transmitting at least one sampled input packet to a processor of said network device, wherein said processor is integrated within said network device;

transmitting at least one packet from said input network circuit to an output network circuit of said network device over a switching fabric of said network device, said output network circuit comprising a plurality of output ports, wherein said input network circuit and said output network circuit feed into said processor;

sampling multiple output packets simultaneously at said plurality of output ports, wherein said sampling comprises using a plurality of countdown circuits, wherein each of said plurality of output ports comprises one of said plurality of countdown circuits; and

transmitting ~~at least one~~ said multiple sampled output ~~packet~~ packets to said processor and a second processor.

11. (Canceled)

12. (Previously Presented) A method as recited in Claim 10 wherein said countdown circuit is a random number countdown circuit.

Claims 13 and 14 (Canceled)

15. (Original) A method as recited in Claim 10 further comprising said processor transmitting said sampled input packet to a statistical monitoring station over a network.

16. (Currently Amended) A method as recited in Claim 10 ~~further comprising said processor transmitting said sampled multiple output packets to a statistical monitoring station over a network~~ wherein said network device is an application specific integrated circuit (ASIC).

17. (Previously Presented) A method as recited in Claim 10 wherein said sampled input packet comprises information regarding said input port performing said sampling at least one input packet at said input port.

18. (Previously Presented) A method as recited in Claim 10 wherein each of said sampled multiple output packets comprises a bitmask regarding which of said plurality of output ports performed said sampling.

19. (Currently Amended) A network device for sampling a packet comprising: processing means, wherein said processing means is integrated into said network device;

means for receiving a plurality of packets over a network, said means for receiving a plurality of packets comprising an input means for sampling at least one

packet and transmitting a sampled incoming packet to said processing means, said means for receiving a plurality of packets coupled to said processing means;

means for transmitting a plurality of packets over said network, said means for transmitting a plurality of packets comprising a plurality of output means for each sampling ~~at least one packet and transmitting a sampled outgoing packet to said processing means, said means for transmitting a plurality of packets coupled to said processing means, wherein said means for receiving a plurality of packets of said network and said means for transmitting a plurality of packets over said network feed into said processing means~~ sampling multiple output packets simultaneously and transmitting said multiple sampled output packets to said processing means and a second processing means, wherein each of said plurality of output means comprises a countdown means, ~~wherein each of said plurality of output means is configured to sample a packet of said plurality of packets according to its countdown means,~~ wherein at least one said input means comprises a countdown means, and wherein said input means is configured to sample a packet of said plurality of packets according to said countdown means; and

switching means coupled to said means for receiving a plurality of packets and said means for transmitting a plurality of packets, said switching means for transmitting a packet between said means for receiving a plurality of packets and said means for transmitting a plurality of packets.

Claims 20 and 21 (Canceled)

22. (Currently Amended) A network device as recited in Claim 19 wherein said processing means transmits said sampled incoming packet ~~and said sampled outgoing packet~~ to a central control means over a network.

23. (Currently Amended) A network device comprising:
a switching fabric;
an input interface coupled to said switching fabric, said input interface comprising a plurality of input ports;
an output interface coupled to said switching fabric, said output interface comprising a plurality of output ports;

a computer-readable memory coupled to said input interface and said output interface; and

a ~~microcontroller~~ processor coupled to said input interface and said output interface, wherein said ~~microcontroller~~ processor is integrated into said network device, wherein said input interface and said output interface feed into said ~~microcontroller~~ processor, said ~~microcontroller~~ processor for executing a method of sampling a packet, said method comprising:

sampling at least one incoming packet received at one of said plurality of input ports, wherein each of said plurality of input ports comprises a countdown register;

transmitting said sampled incoming packet to said ~~microcontroller~~ processor;

transmitting at least one packet from said input interface to said output interface over said switching fabric;

~~sampling at least one outgoing packet at one of said plurality of output ports, wherein each of said plurality of output ports comprises a countdown register~~ sampling multiple outgoing packets simultaneously at said plurality of output ports, wherein said sampling comprises using a plurality of countdown circuits, wherein each of said plurality of output ports comprises one of said plurality of countdown circuits; and

transmitting said multiple sampled outgoing ~~packet~~ packets to said ~~microcontroller~~ processor and a second processor.

24. (Currently Amended) A network device as recited in Claim 23 wherein said method further comprises said ~~microcontroller~~ processor transmitting said sampled incoming packet to a statistical monitoring station over a network.

25. (Currently Amended) A network device as recited in Claim 23 ~~wherein said method further comprises said microcontroller transmitting said sampled outgoing packet to a statistical monitoring station over a network~~ wherein said network device is an application specific integrated circuit (ASIC).